

Brand strategy of global e-commerce

Selective possibility of Korea, Japan, and America

Government, Corporation and Consumer

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Outline

- What decide the win and loss of global e-commerce?
- Net infrastructure is not decisive
 - In Korea broad band coverage is 98%, but in the world, the market exists where net infrastructure has not spread, for example America and Japan and so on.
- As for deciding the success or failure of business is "Brand identity" \cong affinity, reliability and safety etc.....

Achievement of Brand identity by IT corporation(recent Japanese case)

- Fukuoka Softbank Hawks
 - Son Masayoshi president: Resident South Korean.
 - Ou Sadaharu director: Former resident Taiwan type Chinese.
 - Rakuten gorlden EAGLES
 - (Rakuten President :Mikitani)
- =>professional baseball, professional sport management
- By the "live door" purchase of the Fuji Telecasting Co.

The boom of brand identity of "Korea style "

- the IT corporation which succeeds and survive in 1990's makes people acknowledge "the national corporation" brand of Japan by management of professional baseball and professional soccer etc. as the most direct method.
- Brand strategy to general consumer
=> Strengthening the competitiveness

Topic of analysis

- To familiarize e-commerce, though corporations invest net infrastructure, the effect often stays in the back ground.
- => what kind of investment should be done?
- For example: though the corporations raise Broadband coverage, their profits may not rises directly. (As for Korea bb coverage is advanced)
- When, 1) as corporations 2) as the country, what kind of informatization investment should be done, will e-commerce develop?

- From world cup soccer 2002, Japan corporations want to add brand identity to themselves by the Korean popular actor.
– for ex. Bae Yong Joon KDDI, Lotte Co., Ltd.
- Cf "Kimutaku" "日式" (イルシク) brand identity all over the east asia

Demerit

- Limit of e-commerce
 - Existence of inflation, bubble and risk
- Limit of t-commerce
 - Not growth (the opposite of stability)
- T-commerce will continue forever: So as a whole what strategy to win in e-commerce market should have been raised?

What is e-commerce like?

- E-commerce has global market, can decrease costs (such as inventory control costs etc...)
- => The possibility of exceeding space-time until now without being
- T-commerce as an anti concept
- "The general" (local) market has more cost, but its risk is small.
- => Stable, basic market.
- Both T-commerce and e-commerce have their advantage.

The consideration by the macro mathematical model

- Suppose the economy which is formed only from the consumer and enterprise.
- "Information infrastructure coverage" θ is given.
- Under that, we consider optimum level of profit of e-commerce and t-commerce of corporation.
- How does information infrastructure coverage affect the above-mentioned optimum level.

Characters of mathematical model

- Consumer
 - purchase commodity corporation produced in e-commerce or t-commerce.
- Corporation
 - possesses the both section of E-commerce and t-commerce.
 - their sale is the sum of e-commerce and t-commerce.
- T-commerce is basic and fixed, and important, but its growth is difficult to face.
- E-commerce has possibility of high growth, while it has a risk.
- To tell the truth, we would like to know appropriate balance between e-commerce and t-commerce. (This time it is unsolved)

Hypothesis

- We supposed quantity of the commodity which the consumer purchases is given from "fundamental quantity" and the information send by corporation.
- "Fundamental quantity" ... can be a fixed portion in consumption
- Consumption is made from a fixed portion and a fluid portion.
- ... we can estimate what we would like to buy beforehand.
- (ex. "1 hamburger, please.")
- "Information" ... (ex. "How about French fries?" and so on)

Hypothesis 2

- Corporation
 - As for e-commerce, in only ratio of domestic information infrastructure coverage, corporations give consumers an amount of information.
 - As for T-commerce, corporations give the small amount of information.
- It is supposed that corporation and consumers behavior according to the principle of maximizing behavior.
- The government sets up information infrastructure.
- => Role of the government
- I analyze the corporation's, the government's, and the consumer's behavior from the mathematical model.

First introduction : Conclusion of mathematical principle

- Object of corporation.
 - Improvement rise of their income.
- Object of government
 - the increase of profit in the country as a whole.
- To achieve their objects, what they should invest?
- => They should set up "fundamental" information infrastructure which increase e-commerce's brand identity responding to each equity of the government and corporations.

- For example, as for corporations, from raising internet security to getting lots of consumers by image strategy.
 - "Fukuoka Softbank Hawks"
- If the country does not establish the national brand in internet environment, there is no guarantee that it remains undefeated while global e-commerce spreads.
- Though the government simply sets up "information infrastructure", the corporations' profits cannot increase.
- => Importance of strategic investment

Variable

- X, "fundamental quantity" of the commodity which the y consumers purchase
- P, q price of the commodity
- i2 "Information" to e-commerce
- i3 "Information" to t-commerce
- α Brand parameter to e-commerce ()
- β Brand parameter to t-commerce ()
- θ information infrastructure rate

Pay-off function of consumer and corporation

消費者

$$u = \text{効用} - \text{費用}$$

企業

$$\pi = \pi_2 + \pi_3$$

$$\pi_2 = e\text{-コマースの売り上げ} - \text{費用}$$

$$\pi_3 = t\text{-コマースの売り上げ} - \text{費用}$$

Determine functions under hypothesis

$$u = \alpha \sqrt{x\theta i_2} + \beta \sqrt{y i_3} - px\theta i_2 - qy i_3$$

$$\pi_2 = px\theta i_2 - bi_2^2$$

$$\pi_3 = qy i_3 - ci_3^2$$

Maximizing behavior

$$\frac{\partial u}{\partial x} = \frac{\alpha \sqrt{\theta i_2}}{2\sqrt{x}} - p\theta i_2 = 0$$

$$\frac{\partial u}{\partial y} = \frac{\beta \sqrt{i_3}}{2\sqrt{y}} - qi_3 = 0$$

$$\frac{\partial \pi_2}{\partial i_2} = p\theta x - 2bi_2 = 0$$

$$\frac{\partial \pi_3}{\partial i_3} = qy - 2ci_3 = 0$$

Optimum value

$$x^* = \frac{\alpha \sqrt{2b}}{2p^2\theta}$$

$$y^* = \frac{\beta \sqrt{2c}}{2q^2}$$

$$i_2^* = \frac{\alpha}{\sqrt{8bp}}$$

$$\theta = \frac{\alpha \sqrt{2b}}{2p^2 x^*}$$

$$i_3^* = \frac{\beta}{\sqrt{8cq}}$$

$$x\theta i_2 = \frac{\alpha^2}{4p}$$

$$y i_3 = \frac{\beta^2}{4q}$$

Pay-off function under maximizing

$$u = \frac{\alpha^2}{4p} + \frac{\beta^2}{4q}$$

$$\pi^* = \pi_2^* + \pi_3^* = \frac{\alpha^2}{8p} + \frac{\beta^2}{8q}$$

Proposition to corporations

- IT revolution
- => Setting up information infrastructure is almost done
- => With intensification of the corporations' strength, fixation of brand identity is needed.
- Mutual complement relationship of e-commerce and t-commerce
 - => t-commerce is fixed market
 - => e-commerce is developing market
- Importance of brand strategy of e-commerce

Proposition to governments: Korea, Japan US and...

- By regulating the price of the commodity, θ is raised, and it is possible to raise α .
- How to construct the national brand?

What should it be,

the Brand Strategy of

KOREA

in good harmonization of
international

e-commerce world ?

Thank you for your kind attention

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